Amendments to the Specification:

Please add new paragraph 15.1 after paragraph 15:

Figure 9 is a flowchart summarizing the method of AlGaN buffer layer of the nitride-based light-emitting device 1 according to the present invention.

Please replace paragraph 17 with the following amended paragraph:

A method for forming the above-mentioned AlGaN buffer layer of the nitride-based light-emitting device 1 includes the following steps: (a) introducing an Al-containing organometallic reaction source [[TMA1]] TMAl at 800℃ for forming a aluminum-rich transient layer; (b) introducing a Ga-containing organometallic reaction source TMGa and a nitrogen reaction source NH3 under a lower Ⅴ/Ⅲ (Ⅴ/Ⅲ<1000) ratio condition; (c) raising the growth temperature to 1050℃ and growing a high-temperature GaN layer with higher Ⅴ/Ⅲ ratio (Ⅴ/Ⅲ>2000). During the growth of GaN layer, the Al atoms of the aluminum-rich transient layer and the Ga atoms and the N-atoms in the region close to the transient layer will re-arrange. The Al atoms will diffuse upward and the Ga atoms and N atoms will diffuse downward. Then, the Al, Ga and N atoms will bond together and form an AlGaN buffer layer.

Please replace paragraph 18 with the following amended paragraph:

Another method for forming the above-mentioned AlGaN buffer layer of the nitride-based light-emitting device 1, includes the following steps: (a) introducing an Al-containing organometallic reaction source [[TMA1]] TMAl at 1020℃ for forming an aluminum-rich transient layer; (b) introducing a Ga-containing organometallic reaction source

TMGa and an nitrogen reaction source NH3 at the same temperature as in step (a) to grow the high-temperature GaN layer. During the growth of GaN layer, the Al atoms of the aluminum-rich transient layer and the Ga atoms and the N-atoms in the region close to the transient layer will re-arrange. The Al atoms will diffuse upward and the Ga atoms and N atoms will diffuse downward. Then, the Al, Ga and N atoms will bond together and form an AlGaN buffer layer.

Please add new paragraph 18.1 after paragraph 18:

Please refer to Fig.9. Fig.9 is a flowchart summarizing the method of AlGaN buffer layer of the nitride-based light-emitting device 1 according to the present invention. A substrate is provided in step 100. Next, in step 102, a first reaction source comprising a first group III element is introduced into a chamber at a first temperature. The melting point of the first group III element is lower than the first temperature, and the first group III element is deposited directly on the substrate. Then, in step 104, a second reaction source comprising a second group III element and a third reaction source comprising a nitrogen element are introduced into the chamber at a second temperature for forming a ternary nitride-based buffer layer with the first group III element directly on the substrate. The second temperature is not lower than the melting point of the first group III element.